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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/966,487	09/28/2001	C. Kent Aldridge	01RE145 DODG:0046	5298

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EXAMINER

COMPTON, ERIC B

ART UNIT

PAPER NUMBER

3726

DATE MAILED: 04/24/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/966,487

Applicant(s)

ALDRIDGE, C. KENT

Examiner

Eric B. Compton

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 March 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 8-21 and 38-47 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 8-21 38-47 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 8-12, 15-19, 38-40, 41-43, and 47, are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 5,242,229 to McLarty.

McLarty (see Figure 2, esp.) discloses a method of forming a bearing having a two-piece bearing seal. One piece of the bearing seal is engaged with the inner race and the other piece of the bearing seal is engaged with the outer race. The two pieces of the seals cooperate to prevent dirt from interfering with the rolling members. In these references the fingers of the bearing seal pieces engage with corresponding grooves in both the inner and outer races.

However, this reference does not disclose crimping the first and second pieces of the bearing seal to the inner and outer races of the bearing, respectively.

McLarty preferred embodiment is a snap-fit engagement. However, McLarty discloses as prior art, a crimping process as well (see Figure 1).

Regarding claims, 8, 15, and 41, it would have been obvious to one having ordinary skill in the art at the time the invention was made, to have crimped the first and

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second pieces of the bearing seal to the inner and outer races of the bearing, respectively of McLarty, in light of the teachings of his prior art, in order to secure the seal onto the bearing race so that it cannot be withdrawn.

Regarding claims 9-10, 18-19 and 42-43, the prior art of McLarty discloses that the seal is engaged into an annular groove in the bearing race.

Regarding claims 11, 16 and 47, in McLarty the second seal member includes an elastomeric seal located on a support member.

Regarding claims 12 and 17, in McLarty an elastomeric seal is imposed between the inner and outer races, which rotate with respect to each other. It has been held that the recitation that an element is "configured to" perform a function is not a positive limitation but only requires the ability to so perform. It does not constitute a limitation in any patentable sense. In re Hutchison, 69 USPQ 138.

Regarding claim 38-40, the product is inherently disclosed by the method of forming it.

3. Claims 8-21, 38-40, and 41-47, are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 5,242,229 to McLarty or US Patent 5,695,290 to Mondak et al, in view of US Patent 4,336,971 to Reiter.

McLarty (see Figure 2, esp) and Mondak et al (see Figure 5, esp) disclose a method of forming a bearing having a two piece bearing seal. One piece of the bearing seal is engaged with the inner race and the other piece of the bearing seal is engaged with the outer race. The two pieces of the seals cooperate to prevent dirt from

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interfering with the rolling members. In these references the fingers of the bearing seal pieces engage with corresponding grooves in both the inner and outer races.

However, these references do not disclose crimping the first and second pieces of the bearing seal to the inner and outer races of the bearing, respectively.

Reiter discloses a method for assembling a bearing seal. "Initially, the end of the axial wall 62 on each case 60 is straight so that it easily fits over the turned down end surface 34 on the cup 24 or 26, but once the seal case 60 is pressed onto the cup 24 or 26, its axial wall 62 is deformed inwardly into annular groove 32 adjoining the turned down surface 34 to secure the seal case 60 firmly on the cup 24 or 26." (col 6, lines 35-41).

Regarding claims, 8, 15, and 41, it would have been obvious to one having ordinary skill in the art at the time the invention was made, to have crimped the first and second pieces of the bearing seal to the inner and outer races of the bearing, respectively of either McLarty and Mondak et al, in light of the teachings of Reiter, in order to secure the seal onto the bearing race so that it cannot be withdrawn (see col 7, lines 41-43).

Regarding claims 9-10, 18-19, and 42-43, Reiter discloses that the seal is engaged into an annular groove in the bearing race.

Regarding claims 11, 16, and 47, in both McLarty and Mondak et al, the second seal member includes an elastomeric seal located on a support member.

Regarding claims 12 and 17, in both McLarty and Mondak et al an elastomeric seal is imposed between the inner and outer races, which rotate with respect to each

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other. It has been held that the recitation that an element is "configured to" perform a function is not a positive limitation but only requires the ability to so perform. It does not constitute a limitation in any patentable sense. In re Hutchison, 69 USPQ 138.

Regarding claims 13, 14, 20-21, and 44-45, Reiter discloses a collet tool (F, see Figure 4) for crimping the seal. Elastic member (76) is provided, which when collet undergoes elastic deformation, the seal member (60) is crimped into the annular interface (32). The deformation of the elastic ring (76) inherently forms fingers that engage the seal. The number of fingers is dependent of the number of bosses (82) provided. It is inherent that a separate collet would be needed for each crimping operation due to the differences in diameter between the inner and outer races.

Regarding claim 38-40, the product is inherently disclosed by the method of forming it.

Regarding claim 46, Reiter provides a flinger (68).

Response to Arguments

9. Applicant's arguments files March 17, 2003, have been considered but are not found persuasive.

Applicant's arguments with respect to claims 38-40 have been found persuasive. Since, Applicant was previously given an Office Action with regards to the method of making the bearing assemblies, these claims were considered and implicitly rejected in the previous Office Action. Therefore, the withdrawal of the restriction requirement has no bearing of the Finality of the Office Action.

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With respect to Applicant's arguments with respect to McLarty, it has been held that "A prior art reference must be considered in its entirety, i.e., as a whole, including portions that would lead away from the claimed invention." W. L. Gore & Associates Inc. v. Garlock, Inc., 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983). "The use of patents as references is not limited to what the patentees describe as their own inventions or to the problems with which they are concerned. They are part of the literature of the art, relevant for all they contain." In re Heck, 699 F.2d 1331, 1332-33, 216 USPQ 1038, 1039 (Fed. Cir. 1983) (quoting In re Lemelson, 397 F.2d 1006, 1009, 158 USPQ 275, 277 (CCPA 1968)). What is disclosed as —Background of the Invention— or —Prior Art— by the patentee is prior art nonetheless, regardless if the subject matter of the patentee's invention may teach differently. Thus, McLarty is prior art with respect to its teaching of crimping a seal. McLarty, as the patentee, further teaches a snap locking the seal into place. The bearing assembly of Figure 2 and 5 having two seal members, is essentially the same as Applicant's invention with the exception of the crimping. The Examiner used the teaching of the prior art of McLarty to substitute crimping for snap fit, since they are known equivalents for the same purpose. See In re Ruff, 256 F.2d 590, 118 USPQ 340 (CCPA 1958). Lastly, with respect to whether or not it is possible to crimp both seal member, "The test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference ... Rather, the test is what the combined teachings of those references would have suggested to those of ordinary skill in the art." In re Keeler, 642 F.2d 413, 425, 208 USPQ 871, 881 (CCPS 1981). Thus, one of ordinary skill in the art would recognize how

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to crimp the seals without complication, although not expressly disclosed by the reference.

With respect to Applicant's arguments with respect to the obvious rejections, the primary argument is that there is no suggestion to combine since the primary references disclose a snap fit rather than crimping. In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, both McLarty and Mondak et al are cited for their showing of a bearing assembly having first and second seals. The secondary reference to Reiter is cited to show a crimping process. Essentially, this is a substitution of known equivalents as noted above. Furthermore, the Examiner provided ample motivation for crimping in order to secure the seal onto the bearing race so that it cannot be withdrawn as noted by Reiter (col. 7, lines 41-43). Given the resilience of a snap fit, the seal of the primary references could fall out, and so a permanent fit would be appreciated by one of ordinary skill in the art.

Conclusion

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric B. Compton whose telephone number is (703) 305-0240. The examiner can normally be reached on M-F, 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory M. Vidovich can be reached on (703) 308-1513. The fax phone numbers for the organization where this application or proceeding is assigned are (703)

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872-9302 for regular communications and (703) 872-9303 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1148.

ebc

April 22, 2003


GREGORY VIDOVICH
SUPERVISORY PATENT EXAMINER
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